

(ii) a major amount of spherical inorganic matrix particles.

23. The porous shaped article of claim 22 having a structured surface.

5 24. The porous shaped article of claim 22 being a mold.

25. The porous shaped article of claim 22 comprising the inorganic particles and the binder in a weight ratio of about 100 : 10 to about 100 : 0.1.

10 26. The porous shaped article of claim 22 comprising the inorganic matrix particles and the binder in a weight ratio of about 100 : 8 to about 100 : 1.0.

27. The porous shaped article of claim 22 comprising the inorganic matrix particles and the binder in a weight ratio of about 100 : 8 to about 100 : 3.5.

15 28. The porous shaped article of claim 22 wherein the binder is selected from the group consisting of organic polymers and alkali silicates.

20 29. The porous shaped article of claim 22 wherein the binder is an organic polymer and is selected from the group consisting of thermoplastic polymers.

30. The porous shaped article of claim 22 wherein the binder is selected from the group consisting of cured polymers.

25 31. The porous shaped article of claim 28 wherein the alkali silicate is selected from the group consisting of sodium-water glasses, potassium-water glasses and mixtures thereof.

32. The porous shaped article of claim 28 wherein the thermoplastic organic binder is a thermoplastic organic polymer and is selected from the group consisting of polyether-ether-ketones (PEEK), polyvinylchloride (PVC), polypropylene (PP), polyethylene (PE), acrylnitrile-butadiene-styrene-copolymers (ABS), polycarbonates (PC), polymethylmethacrylate (PMMA), polyvinylidenfluoride (PVDF) and thermoplastic polyolefins (TPO).

33. The porous shaped article of claim 30 wherein the cured polymer is selected from the group consisting of epoxy resins, polyurethane (PU) resins, alkyd resins, unsaturated polyester (UP) resins, melamine resins, vinylester resins and acrylate resins and phenolic resins.

34. The porous shaped article of claim 22 wherein the inorganic spherical matrix particles are made of a material selected from the group consisting of aluminium, copper, iron, steel, titanium, platinum, manganese, zinc, bronze and other metal alloys, coal, glass, ceramic, quartz, silica, silicon carbide, tungsten carbide, boron carbide, metakaolin, calcinated clay, chinese clay, calcium carbonate, barium sulfate, aluminium oxide, and magnesium oxide.

35. The porous shaped article of claim 22 wherein the spherical inorganic matrix particles have a mean particle diameter of from about 5 to about 80  $\mu\text{m}$ .

36. The porous shaped article of claim 22 wherein the spherical inorganic matrix particles have a mean particle diameter of from about 10 to less than about 50  $\mu\text{m}$ .

37. The porous shaped article of claim 22 wherein the spherical inorganic matrix particles have a mean particle diameter of from about 25 to about 40  $\mu\text{m}$ .

38. The porous shaped article of claim 22 wherein at least about 80 wt-% of the spherical inorganic matrix particles have a particle size which does not deviate more than about 15 % from the average particle size.

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39. The porous shaped article of claim 22 wherein at least about 85 wt-% of the spherical inorganic matrix particles have a particle size which does not deviate more than about 15 % from the average particle size.

10 40. The porous shaped article of claim 22 wherein at least about 98 wt-% of the spherical inorganic matrix particles have a particle size which does not deviate more than about 15 % from the average particle size.

15 41. The porous shaped article of claim 22 made from a mixture which further comprises a chemical foaming agent.

42. The porous shaped article of claim 41 wherein the chemical foaming agent is selected from the group consisting of  $\text{NH}_4\text{HCO}_3$  and  $\text{Ca}(\text{H}_2\text{PO}_4)_2$ .

20 43. The porous shaped article of claim 41 wherein the chemical foaming agent is present in an amount of from about 0.1 to about 2 % by weight, based on the total amount of the composition.

25 44. The porous shaped article of claim 41 wherein the chemical foaming agent is present in an amount of from about 0.1 to about 1 % by weight, based on the total amount of the composition.

45. A method of making a porous shaped article comprising the steps of